



***Air Force Operational Medicine:
Using the Enterprise Estimating Supplies Program to
Develop Materiel Solutions for the
Thoracic/Vascular Surgery Team (FFGKT)***

*Ralph Nix
Curt Hopkins
Vern Wing
Carrie Brown
Charles E. Jackson*



Naval Health Research Center

Document No. 10-16P

The views expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U.S. Government. Approved for public release; distribution is unlimited.

***Naval Health Research Center
140 Sylvester Rd.
San Diego, California 92106-3521***

**Air Force Operational Medicine: Using the Enterprise Estimating Supplies Program to
Develop Materiel Solutions for the Thoracic/Vascular Surgery Team (FFGKT)**



U.S. AIR FORCE

Ralph Nix
Curt Hopkins
Vern Wing
Carrie Brown
Charles Jackson

Naval Health Research Center
140 Sylvester Rd.
San Diego, CA 92106-3521



Report No. 10-16P, supported by the U.S. Air Force Medical Logistics Agency, under Work Unit No 60334. The views expressed in this article are those of the authors and do not reflect the official policy or position of the Navy, Department of Defense, or the U.S. Government. Approved for public release; distribution is unlimited. This research has been conducted in compliance with all applicable federal regulations governing the protection of human subjects. No human subjects were directly involved in this research.

Executive Summary

The Naval Health Research Center (NHRC) has used its modeling and simulation expertise to develop and update conventional U.S. Air Force medical assets since 2004. Air Force medical modeling capabilities currently capture care and treatment of the sick and injured from the first responder through theater hospitalization.

The objective of this study was to leverage medical modeling and simulation advantages to provide recommendations for allowance standard (AS) configurations based on the Air Force Thoracic/Vascular Surgery Team (FFGKT) operational and clinical requirements.

NHRC analysts reviewed the FFGKT, analyzed clinical requirements with subject matter experts, and used modeling and simulation tools to develop the operationally based and patient-driven recommended 917G AS line list.

The Unit Type Code (UTC) capabilities, operational requirements, and materiel solutions were identified, addressing issues of modernization, clinical requirement, standardization, and redundancy. In this study, 42 line items were recommended for deletion due to redundancy and clinical requirement. The net decrease in weight and cube was 26.93%, with a 23.7% decrease in cost.

Modeling and simulating a medical system like the FFGKT, with a range of capabilities and functional areas, validates the materiel solutions for each UTC. It is effective in facilitating AS reviews that focus on advancing the mission, operational requirements, and capabilities of these agile, deployable medical resources.

Table of Contents

Introduction.....	4
Method	4
Subject Matter Expert Guidance	5
Patient Stream	5
Expeditionary Medical Knowledge Warehouse	6
Capability	7
Results	7
Change Justification.....	7
Quantity Changes.....	8
Conclusion	9
References	11
Appendix A. Thoracic/Vascular Surgery Team Allowance Standard Recommended	
Configuration	A-1

Introduction

The Naval Health Research Center (NHRC) has used its modeling and simulation expertise to develop and update U.S. Air Force medical capabilities, allowance standards (ASs), and surgical subspecialty Unit Type Codes (UTCs) since 2004. Air Force medical units must remain small, light, and flexible. Based on the success of previous work, the Air Force asked NHRC to conduct a study of the Thoracic/Vascular Surgery Team (FFGKT) (Konoske, 2009).

The U.S. Air Force Medical Services are faced with a wide range of potential scenarios, from providing warfighters forward resuscitative care to assisting civilian populations during humanitarian relief operations. Air Force planners and UTC developers have closely followed the *Joint Vision 2010* concept of providing highly mobile medical resources with a minimal logistic footprint, without compromising capability (Office of the Joint Chiefs of Staff, 1998). Additionally, guidance provided by the *Joint Vision 2020* calls for a more scientific approach that leverages and enhances existing information technologies to support modern operational capabilities (Office of the Joint Chiefs of Staff, 2000). Emphasis on mobility and capability resulted in a modular approach to prepare, plan, and deploy the FFGKT expeditionary medical platform.

Method

The NHRC method of modeling medical supply requirements was developed to establish and/or review medical inventories for various levels of care. Its aim is to give clinicians in the field the materiel they need to provide the best care possible, while still maintaining as small a logistical footprint as possible. It involves a process that begins with the identification of likely patient types to be encountered by a particular type of medical treatment asset, including combat wounds, non-battle injuries, and illnesses. *International Classification of Diseases*, Ninth Revision (ICD-9) coded patient conditions selected by the Defense Medical Materiel Program Office are used for this purpose. In this study, the Enterprise Estimating Supplies Program (EESP) was the only application used to generate estimates of the initial supplies and equipment needed for this scenario. Figure 1 illustrates the typical NHRC processes used when developing a modeling and simulation package.

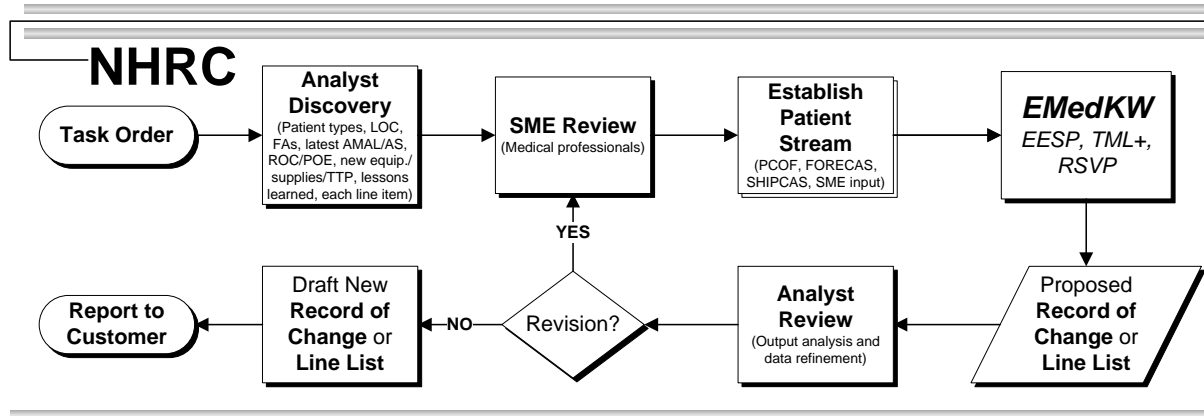


Figure 1. An example of the NHRC AS reviews process.

Subject Matter Expert Guidance

A subject matter expert (SME) AS review was performed on the FFGKT at David Grant USAF Medical Center, Travis Air Force Base on January 7, 2010. At this meeting, SMEs and NHRC analysts refined and validated assumptions regarding equipment and supply associations, and the range and scope of patient types.

Patient Stream

To determine the initial supply and equipment requirements, NHRC analysts developed a scenario depicting the expected range and types of patients that would be seen and treated at a deployed military treatment facility. The Patient Condition Occurrence Frequency (PCOF) tool was used to develop a patient stream that is representative of both the range of patient conditions and the frequency at which they would present. The resulting illness and injury frequencies characterize the expected patient conditions within the patient stream.

The FFGKT medical supplies were generated using the PCOF tool patient occurrences—selecting an average throughput of 10 patients. The number of randomly selected patient types is rarely the same number of patients in the resulting scenario. In this case, 10 patients were estimated, resulting in a patient stream of 13. In this patient stream, four are poly-traumas, which accounts for more than one ICD-9 code. The scenario is shown in Table 1.

Table 1
Thoracic/Vascular Scenario

ICD-9	ICD-9 description	No. patients
903.9	INJURY ARM VESSEL NOS	2
904.8	INJURY LEG VESSEL NOS	7

ICD-9	ICD-9 description	No. patients
827.1	FX LOWER LIMB NEC-OPEN	2
903.9	INJURY ARM VESSEL NOS	
818.1	FX ARM MULT/NOS-OPEN	
904.8	INJURY LEG VESSEL NOS	
860.5	TRAUM PNEUMOHEMOTHOR- OPN	
827.1	FX LOWER LIMB NEC-OPEN	1
956.8	INJ MULT NERVE PELV/LEG	
904.8	INJURY LEG VESSEL NOS	
863.50	COLON INJURY NOS-OPEN	
904.8	INJURY LEG VESSEL NOS	1
818.1	FX ARM MULT/NOS-OPEN	
955.8	INJ MULT NERVE SHLDR/ARM	
827.1	FX LOWER LIMB NEC-OPEN	
956.8	INJ MULT NERVE PELV/LEG	
903.9	INJURY ARM VESSEL NOS	
866.10	KIDNEY INJURY NOS-OPEN	
Total		13

Expeditionary Medical Knowledge Warehouse

The patient stream is input to the Expeditionary Medical Knowledge Warehouse (EMedKW) program to perform modeling and simulation. EMedKW is comprised of the EESP, the Tactical Medical Logistics (TML+) planning tool, and the ReSupply Validation Program (RSVP). This is a service-oriented architecture system designed to protect and organize medical data. EMedKW provides medical planners with the ability to estimate the equipment and consumable items needed to treat a particular patient distribution, while also tracking inventory to monitor mission readiness. Within EMedKW, the tasks required to treat each PC code are identified and matched with the required equipment and consumable items. Analysis and review of the output informs the development of an appropriate line list.

The following example describes the internal EMedKW processes (see Figure 2). The task profile shows the likely clinical tasks to be performed on this type of patient in that functional area, and the percentage of those patients expected to receive them. The “Equipment/supplies” column identifies the items needed to complete the “Insert endo-trach tube” task at that level of capability. Not shown in this figure are additional data fields used to calculate supply quantities, including the amount of each supply needed to complete the task, how often the task will be repeated in the first 24 hours of treatment, how often the task will be repeated in each subsequent 24-hour period, and the average length of stay at that facility.

ICD-9 code	Medical capability	Functional area	Task profile	Patients %	Equipment/supplies
800.13	Emergency forward care	Triage/pre-op	Triage	100	Laryngoscope INF/ADL w/ 4 detachable blades
800.26	Forward	O.R.	Patient assessment	100	Tube trach endotrach double lumen left 39 Fr
800.42	resuscitative care	Ward/ICU	Insert endo-trach tube	30	Forceps trach McGill fenestrated
800.60	Theater	Radiology	Neuro checks	100	Lubricant surgical 5 gram 144S
801.01	hospitalization	Lab	Apply c-collar	60	Vecuronium bromide inj 10mg/ml 10ml vial
850.1	Definitive care	Pharmacy	Set-up O2	60	Basin emesis plastic disp., 250S
850.9			Admin O2	20	Gloves patient exam large 100s
-			Cardiac monitoring	100	Syringe hypodermic 3ml Luer Lock 100s
-			CPR	80	Needle hypodermic 20ga 1.43-1.56 Luer Lock, 100S
870.4			Emergency control hemorrhage	100	Pad isopropyl impregnated, 200S

Figure 2. An example of NHRC's programmatic modeling process using ICD-9 Code 800.13.

Capability

The FFGKT provides theater-level coordinated care for patients with thoracic and vascular injuries. The FFGKT capabilities include acute surgical intervention for chest trauma and repair of major vessels. Minimally invasive thoracic procedures, such as thoracoscopy, video-assisted thoracic surgery, and laparoscopy, are excluded from the thoracic/vascular capability.

The FFGKT UTC relies on the EMEDS +25. This UTC can only be deployed to a facility that has a functional general surgery service. The majority of the patients treated by this UTC will require intensive critical care, and require maintenance on ventilators, monitoring of blood gas, and invasive hemodynamic monitoring. Ancillary support includes radiology, angiography with fluoroscopy, and laboratory. Staffing this capability requires a peripheral vascular surgeon, a thoracic surgeon, and an anesthesiologist.

Results

Change Justification

Modeling and simulation provides visibility for change justifications. Change justifications are typically placed in four categories; modernization, clinical requirement, standardization, and redundancy. When categorizing these changes, NHRC takes care to make sure modifications are purposeful, within the context of the unit's tactics, techniques, and procedures, and in-line with the functional area's mission.

In this study, 42 line items were recommended for deletion due to redundancy and clinical requirement. All the redundant items are found in EMEDS +25, and are part of the UTC's core capability. A small portion of the deletions are due to clinical requirement. In this case, the

clinical requirements are inherent to EMEDS +25, and not identified as a specific requirement for the FFGKT UTC. Figure 3 provides a graph of the justifications for change recommended by this study.

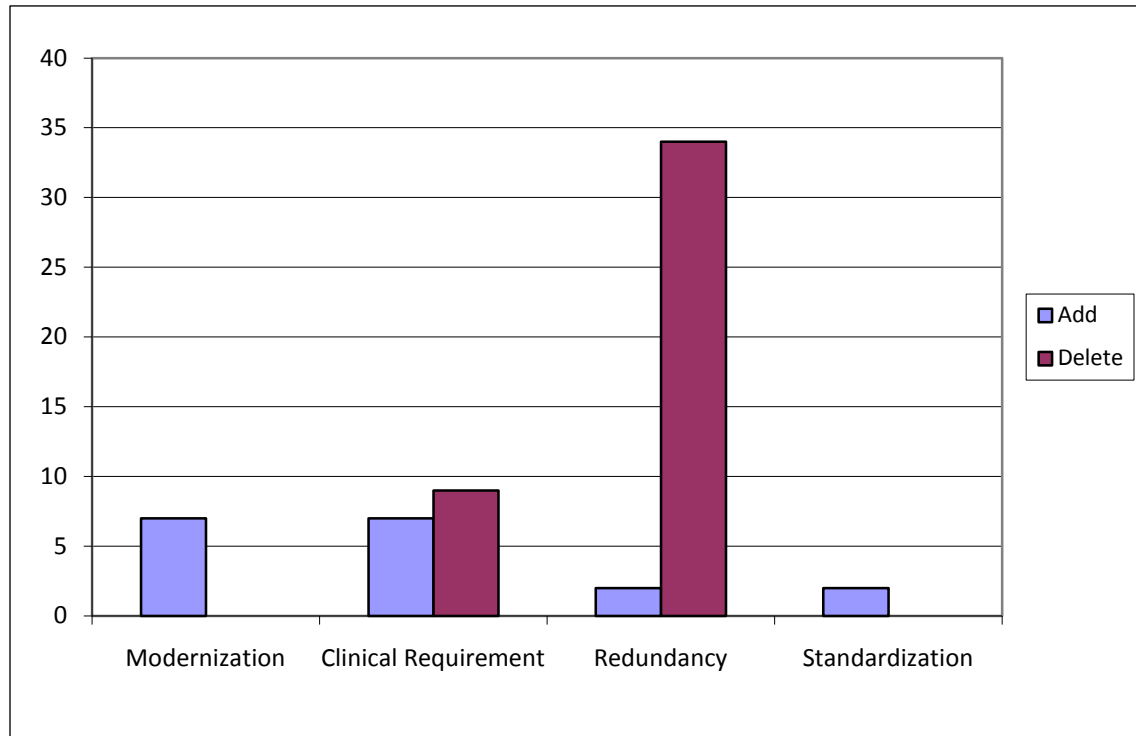


Figure 3. This graph shows the FFGKT justifications for change.

Quantity Changes

There two were items identified as deletions with replacements. The wire-cutting scissors (NSN 6515011511822) are small, delicate, and dull easily. These are recommended to be replaced by heavier-duty, craftsman- style wire cutters. A suitable standard solution for this item was not found in the Universal Data Repository, and needs to be addressed by Manpower and Equipment Force Packaging System logisticians. The Russian forceps 5.75–6.25 in. (NSN 6515002998325) are too short, and are recommended to be replaced by a longer Russian forceps. The recommended replacement item is provided in the line list.

New items for the allowance standard included an endovascular GIA stapler with handle, and a range of cartridges for the blue 3.5 (medium thickness), green 4.5, and white (vascular). Also recommended for addition is a Lepshke knife with hammer and a battery operated sternal saw. A small 8 x 3 inch surgical tray to hold the set of vascular dilators (NSN 6515012997133) is an addition recommended by the Pilot Unit. The set comes with a metal tube to hold the dilators, but it is inadequate.

Iopromide injection was the only item in the medication category, and removal is recommended. Iopromide is a contrasting agent used for radiology, and readily available within the EMEDS +25 radiology UTC.

Consumables represent the area with the greatest change in weight, cube, and cost. This is primarily attributable to the deletion of high-cost items due to either redundancy or clinical requirement. A detailed line list is provided in Appendix. A

Table 2
FFGKT Weight, Cube, and Cost

Category	Weight	Cube	Cost
AS equipment	624.53	135.51	\$106,215.54
EESP equipment	580.76	117.38	\$102,421.56
Difference	-43.78	-18.13	-\$3,793.98
Percent change	-7.01	-13.38	-3.57
AS medication	1.55	0.24	\$968.32
EESP medication	0.12	0.06	\$242.08
Difference	-1.43	-0.18	-\$726.24
Percent change	-92.26	-75.00	-75.00
AS consumable	267.19	75.01	\$90,898.38
EESP consumable	71.92	35.43	\$48,018.74
Difference	-195.26	-39.58	-\$42,879.64
Percent change	-73.08	-52.77	-47.17
AS total	893.27	210.54	\$197,159.15
EESP total	652.68	152.81	\$150,440.30
Difference	-240.59	-57.73	-\$46,718.85
Percent change	-26.93	-27.42	-23.70

Conclusion

A modeling and simulation study was conducted on the FFGKT. The clinical capabilities include acute surgical intervention for chest trauma and repair of major vessels. Minimally invasive thoracic procedures, such as thoracoscopy, video-assisted thoracic surgery, and laparoscopy, are excluded from the thoracic/vascular capability. A patient stream was developed that was representative of the type and frequency of patients likely to be seen at this level of care and functional area.

Modeling and simulation tools are essential for projecting appropriate medical care needs for our service personnel. Standardizing equipment and consumables with the Defense Medical Materiel

Program Office-approved items makes the FFGKT review more efficient. Updating and maintaining the patient data and FFGKT contents database will ensure that future medical needs are met in the most effective manner

References

- Konoske, P. (2009). *Statement of Work FY10: Using the Naval Health Research Center's Medical Planning Applications to Review or Validate Air Force Medical Requirements and Capabilities*. San Diego, CA: Naval Health Research Center.
- Office of the Joint Chiefs of Staff. (1998). *Joint Vision 2010*. Washington, DC: Department of Defense.
- Office of the Joint Chiefs of Staff. (2000). *Joint Vision 2020*. Washington, DC: Department of Defense.

Appendix A.
Thoracic/Vascular Surgery Team Allowance Standard Recommended Configuration

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
Equipment										
A	6515003866600	CANNULA ABDOM POOLE 23FR 8.75IN FEN CURV HUB	3	3	0.33	0.30	\$214.68	0.33	0.30	\$214.68
A	6515003867600	CANNULA LARYN ANGUL YANK 9IN 0.234-0.266IN	3	3	0.57	0.30	\$109.14	0.57	0.30	\$109.14
A	6515011398257	CANNULA SUCT SURG FRAZIER 4.5IN LONG BLUNT TIP ANG	1	1	0.10	0.82	\$86.03	0.10	0.82	\$86.03
A	6515011398904	CLAMP ARTERY CASTANEDA 4.75IN CURVED INFANT SIZE .875IN JAW	2	2	0.02	0.00	\$179.68	0.02	0.00	\$179.68
A	6515006903197	CLAMP ARTERY COOLEY DESIGN 7.5IN SHALLOW	2	2	0.36	0.20	\$531.06	0.36	0.20	\$531.06
A	6515011665103	CLAMP ARTERY DEBAKEY 8.5CM CURV SERR 1IN JAW	2	2	0.10	0.02	\$283.98	0.10	0.02	\$283.98
A	6515011656747	CLAMP ARTERY DEBAKEY 8.5CM SERRATED STRAIGHT 1IN JAW	2	2	0.12	0.02	\$221.52	0.12	0.02	\$221.52
A	6515006903238	CLAMP ARTERY DEBAKEY ANGULAR & SERRATED 30MM	4	4	1.24	0.40	\$910.76	1.24	0.40	\$910.76
A	6515006903227	CLAMP ARTERY DEBAKEY ANGULAR & SERRATED 57MM	2	2	1.00	0.20	\$632.86	1.00	0.20	\$632.86
A	6515006903225	CLAMP ARTERY DEBAKEY ANGULAR & SERRATED 70MM	2	2	0.42	0.20	\$632.82	0.42	0.20	\$632.82
A	6515006903195	CLAMP ARTERY DEBAKEY CURVED & SERRATED 120MM	2	2	3.12	0.39	\$604.26	3.12	0.39	\$604.26

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515006903196	CLAMP ARTERY DEBAKEY CURVED&SERRATED 105MM JA	2	2	0.62	0.20	\$1,126.02	0.62	0.20	\$1,126.02
A	6515006903213	CLAMP ARTERY DEBAKEY DESIGN RATCH-PAWL 7IN	4	4	0.40	0.80	\$743.60	0.40	0.80	\$743.60
A	6515006903212	CLAMP ARTERY DEBAKEY-BAHNSON CURVED	2	2	1.00	0.20	\$423.52	1.00	0.20	\$423.52
A	6515006903216	CLAMP ARTERY GLOVER 9 CM SERRATED CURVED	2	2	0.18	0.02	\$204.88	0.18	0.02	\$204.88
A	6515008901682	CLAMP ARTERY GLOVER BULLDOG 6.5CM CURV	2	2	0.12	0.01	\$293.70	0.12	0.01	\$293.70
A	6515011398903	CLAMP ARTERY JAVID LG SZ 17.8CM 6MM JAW ANG	2	2	0.08	0.00	\$938.40	0.08	0.00	\$938.40
A	6515011648887	CLAMP BRONCHUS 9IN CURVED LEFT TEETH 1.50IN	2	2	0.40	0.40	\$505.20	0.40	0.40	\$505.20
A	6515011667827	CLAMP BRONCHUS SAROT 9IN CURVED RIGHT JAW	2	2	1.00	0.20	\$117.52	1.00	0.20	\$117.52
A	6515011398191	CLAMP COARCTATION GLOVER DESIGN ANGULAR 22.5C	2	2	0.20	0.20	\$520.92	0.20	0.20	\$520.92
A	6515011398190	CLAMP COARCTATION GLOVER DESIGN STRAIGHT 22.5	2	2	0.20	0.20	\$134.44	0.20	0.20	\$134.44
A	6515013205616	CLAMP VASCULAR PERIPHERAL FOGARTY 4.625IN ANG JAW HYDRAGRIP	2	2	0.20	0.00	\$1,068.56	0.20	0.00	\$1,068.56
A	6515011398905	CLAMP VASCULAR SERREFINE 2.25INLG DIEFFENBACH	2	2	0.40	0.72	\$58.50	0.40	0.72	\$58.50
B	6515014977104	COIL EMBOLIZATION CRS 2CM LG 3MM OD STER DISP EMBO COILS 2S	1	2	0.02	0.03	\$123.34	0.04	0.06	\$246.68

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515003632300	CONDUCTOR BONE CUTTING WIRE SAW BAILEY STEEL	1	1	0.30	0.10	\$59.09	0.30	0.10	\$59.09
C	8340NCM060740	CONTAINER, STORAGE REUSAB	6	4	30.00	30.00	\$1,446.00	20.00	20.00	\$964.00
A	6515003208500	CONTRACTOR RIB BAILEY DOUBLE-RAKE TYPE	2	2	0.77	0.20	\$414.66	0.77	0.20	\$414.66
A	6515015572732	CUFFS AORTIC EXTENDER STENT GRAFT FLARED DIA-20MM LG-4CM 21FR	1	1	1.00	0.56	\$5,187.38	1.00	0.56	\$5,187.38
A	6515015572597	CUFFS AORTIC EXTENDER STENT GRAFT FLARED DIA-22MM LG-4CM 21F	1	1	2.00	0.05	\$5,187.38	2.00	0.05	\$5,187.38
A	6515015572623	CUFFS AORTIC EXTENDER STENT GRAFT FLARED DIA-24MM LG-4CM 21FR	1	1	2.00	0.05	\$5,187.38	2.00	0.05	\$5,187.38
A	6515003225550	CURETTE MASTOID SPRATT SIZE 2 SPOON SHAPE BLA	1	1	0.20	0.10	\$77.64	0.20	0.10	\$77.64
A	6515012997133	DILATOR SET VASCULAR GARRETT SZ 1-1.5-2-2.5-3-3.5-4-4.5-5MM	1	1	0.55	0.05	\$625.10	0.55	0.05	\$625.10
A	6515010606802	DISSECTOR GEN SURG NO. 4 PENFIELD DSGN 8.5IN	2	2	0.40	0.20	\$197.56	0.40	0.20	\$197.56
A	6515003276600	ELEVATOR NASAL FREER DESIGN 7.50IN	2	2	0.40	0.20	\$98.26	0.40	0.20	\$98.26
A	6515011398996	ELEVATOR PERIO KEY STYLE 0.500IN BLADE	1	1	0.38	0.18	\$51.83	0.38	0.18	\$51.83
A	6515012994276	ELEVATOR PERIOSTEAL MATSON 8.75IN LG CRVD BLUNT SGL EDGE BLADE	2	2	0.44	0.01	\$247.08	0.44	0.01	\$247.08
A	6515015560111	ENDOSCOPIC INSTRUMENT FIBER OPTIC 3.1MM OUTER DIA	1	1	1.00	0.05	\$13,714.8 2	1.00	0.05	\$13,714.8 2

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515015560098	ENDOSCOPIC INSTRUMENT FIBER OPTIC F/ADULTS	1	1	1.00	0.05	\$13,714.8 2	1.00	0.05	\$13,714.8 2
A	6515011410809	FILE BONE 1/2X3-1/2IN BLADE 9IN	1	1	0.10	0.58	\$99.02	0.10	0.58	\$99.02
A	6515014961097	FORCEP AORTIC ANEURYSM 7.25IN O/A LG DEBAKEY S-SHAPE 76MM JAW	1	1	0.16	0.08	\$261.69	0.16	0.08	\$261.69
A	6515003333700	FORCEP DRESSING 10IN STRT&SERR RD TIP HEAVY	4	4	1.00	0.40	\$46.56	1.00	0.40	\$46.56
A	6515003373900	FORCEP GAUZ PAD HOLD FOERSTER 9IN LOCK JOINT	4	4	0.92	0.40	\$107.28	0.92	0.40	\$107.28
A	6515006878054	FORCEP HEMO 5.5IN CRILE CURVED JAW STR HDL	16	16	2.40	1.60	\$594.08	2.40	1.60	\$594.08
A	6515011398213	FORCEP HEMO MIXTER 1IN JAW 5.50IN 14CM	2	2	0.02	0.00	\$59.30	0.02	0.00	\$59.30
A	6515003349500	FORCEP HEMO PEAN SLIGHTLY CURVED JAW 9IN	4	4	1.40	1.40	\$222.00	1.40	1.40	\$222.00
A	6515003347500	FORCEP HEMO ROCH-OCHS 1.875IN JAW 7.25IN SZ 2	10	10	3.00	1.00	\$665.90	3.00	1.00	\$665.90
A	6515003382900	FORCEP HEMO SCHMIDT 7.25IN CRVD SERR TONSIL	10	10	7.00	1.00	\$119.90	7.00	1.00	\$119.90
A	6515011398941	FORCEP TISSUE 12IN CLASSIC DEBAKEY DESIGN CRS	4	4	0.40	0.40	\$177.08	0.40	0.40	\$177.08
A	6515011474668	FORCEP TISSUE ALLIS 10INCH (25.4CM)	4	4	0.40	0.02	\$185.80	0.40	0.02	\$185.80
A	6515003380300	FORCEP TISSUE ALLIS 6IN PIV STRT&SMOOTH JAW	4	4	0.40	0.40	\$85.80	0.40	0.40	\$85.80

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515011690292	FORCEP TISSUE BONNEY 6 3/4IN LONG	4	4	1.00	0.05	\$82.64	1.00	0.05	\$82.64
A	6515006903209	FORCEP TISSUE DEBAKEY 9.5IN TWZR STR&SER JAW	4	4	1.24	0.40	\$219.80	1.24	0.40	\$219.80
A	6515004426883	FORCEP TOWEL 5.25INDMND KNURL PATTERN NONPERF	12	12	2.28	1.20	\$467.64	2.28	1.20	\$467.64
A	6515014961926	FORCEPS AURICULAR APPENDAGE CRS 10.0 O/A LG V MUELLER CLAMP	2	2	0.56	0.20	\$732.78	0.56	0.20	\$732.78
A	6515013707543	FORCEPS BIOPSY ENDOSCOPIC ALLIGATOR JAW BLUE	1	1	0.01	0.00	\$522.58	0.01	0.00	\$522.58
A	6515011405292	FORCEPS BIOPSY NASAL-ETHMOID FENESTRATED CUP 5.5FR 105CM	1	1	0.27	0.02	\$365.50	0.27	0.02	\$365.50
A	6515011348239	FORCEPS BONE CUTTING CORYLLOS 14IN DESIGN RIB SHEARS RIGHT	1	1	1.20	6.80	\$691.93	1.20	6.80	\$691.93
A	6515003311300	FORCEPS BONE CUTTING LISTON-STILLE 10.25IN	1	1	1.00	1.00	\$496.61	1.00	1.00	\$496.61
A	6515011648883	FORCEPS BONE HOLDING VERBRUGGE 9.75IN CURVED	1	1	0.20	0.20	\$285.35	0.20	0.20	\$285.35
A	6515014961055	FORCEPS CARDIOVASCULAR MULTI-PURPOSE CRS 8.0INO/A LG COOLEY	1	1	0.16	0.08	\$345.36	0.16	0.08	\$345.36
A	6515003344900	FORCEPS HEMO HALSTED 4.75-5.25IN CRVD SER	12	12	1.20	0.60	\$94.32	1.20	0.60	\$94.32
A	6515011397885	FORCEPS HEMO LIGACLIP 10.5IN 15DEG ANGLE	2	2	0.40	0.02	\$188.94	0.40	0.02	\$188.94
A	6515003344300	FORCEPS HEMO ROCH-PEAN 6-6.50IN1.875QTR-CRV	12	12	1.32	1.20	\$115.08	1.32	1.20	\$115.08

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
C	6515010489066	FORCEPS HEMO STORZ/STOREY RIGHT ANGLE 8IN	4	2	0.60	2.55	\$304.08	0.30	1.27	\$152.04
A	6515014968330	FORCEPS HYPOGASTRIC CLAMP DEBAKEY CRS 9.75IN O/A LG	2	2	0.24	0.16	\$747.14	0.24	0.16	\$747.14
A	6515003352900	FORCEPS INTESTINAL BABCOCK 8IN STRAIGHT	6	6	1.08	0.60	\$90.00	1.08	0.60	\$90.00
A	6515003355800	FORCEPS KIDNEY PEDICLE GUYON-PEAN 9.5IN	2	2	1.68	0.20	\$489.06	1.68	0.20	\$489.06
A	6515003359100	FORCEPS LUNG GRASPING COLLIN TRIANGULAR 8IN	4	4	0.48	0.40	\$686.28	0.48	0.40	\$686.28
A	6515011398939	FORCEPS THORACIC 11IN LG ANGULAR SOFT JAW	8	8	2.56	1.60	\$1,858.32	2.56	1.60	\$1,858.32
A	6515011398938	FORCEPS THORACIC 9IN	6	6	1.20	1.50	\$539.76	1.20	1.50	\$539.76
A	6515014961346	FORCEPS THORACIC CLAMP CRS .875 JAW LG 6.0IN O/A LG	2	2	0.24	0.16	\$746.62	0.24	0.16	\$746.62
A	6515014961347	FORCEPS THORACIC CRS CLAMP 11.5IN O/A LG STR JAWS	4	4	0.48	0.32	\$2,766.60	0.48	0.32	\$2,766.60
A	6515014961246	FORCEPS THORACIC DEBAKEY & BULLDOG CRS 5.0IN O/A LG	4	4	0.48	0.32	\$907.80	0.48	0.32	\$907.80
A	6515014961148	FORCEPS THORACIC DEBAKEY CRS 5IN O/A LG STR JAWS & HANDLE	4	4	0.72	0.32	\$846.40	0.72	0.32	\$846.40
A	6515014961179	FORCEPS THORACIC DEBAKEY CRS CLAMP 9.0IN O/A LG	4	4	0.52	0.32	\$1,080.20	0.52	0.32	\$1,080.20
A	6515014961937	FORCEPS THORACIC PROFUNDA GREGORY CLAMP 7.0 O/A LG 2.5 JAW LG	2	2	0.30	0.16	\$649.50	0.30	0.16	\$649.50

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515014961267	FORCEPS THORACIC CRS CLAMP 8.75IN O/A LG	2	2	0.24	0.16	\$1,153.58	0.24	0.16	\$1,153.58
A	6515006903208	FORCEPS TISS DEBAK 7.75IN TWEEZER STR&SER JAW	4	4	0.76	0.40	\$178.20	0.76	0.40	\$178.20
A	6515003379900	FORCEPS TISSUE 5.5IN TWEEZER STR & SMOOTH	4	4	0.40	0.40	\$65.12	0.40	0.40	\$65.12
A	6515003377800	FORCEPS TISSUE ADS4.50INTWEEZ STRT & SMTH JAW	4	4	0.80	0.40	\$313.32	0.80	0.40	\$313.32
A	6515014961030	FORCEPS TISSUE BABCOCK CRS 9.5INO/A LG THORACIC 16MM JAW WIDTH	4	4	0.48	0.32	\$479.28	0.48	0.32	\$479.28
A	6515005843738	FORCEPS TISSUE BROWN-ADSON 4.5IN TWEEZER ST	4	4	0.28	0.01	\$186.44	0.28	0.01	\$186.44
A	6515014961254	FORCEPS TISSUE DEBAKEY & GERALD CRS 7IN O/A LG	4	4	0.48	0.32	\$602.92	0.48	0.32	\$602.92
E	6515012988017	FORCEPS TISSUE GEN SURG RUSSIAN RD TIP 10"LG TWEEZER TYPE CRS	0	4	0.00	0.00	\$0.00	0.80	0.34	\$239.08
D	6515002998325	FORCEPS TISSUE RUSSIAN 5.75-6.25IN TWEEZER	4	0	0.80	0.40	\$136.92	0.00	0.00	\$0.00
A	6515004426882	FORCEPS TOWEL 3.75IN DIAMOND KNURL PATTERN NONPERF	12	12	1.20	0.12	\$345.84	1.20	0.12	\$345.84
A	6515013564406	FORCEPS VASCULAR DEBAKEY BULLDOG 5IN STR TIP 45 DEG JAW ANG	4	4	1.20	0.06	\$674.48	1.20	0.06	\$674.48
A	6515014995074	FORSEPS INTESTINAL MEEKER 10.75IN O/A LG ARTERY RT ANGLE	4	4	0.60	0.40	\$256.92	0.60	0.40	\$256.92
A	6515003632400	HANDLE BONE CUTTING WIRE SAW GIGLI OVAL	1	1	0.13	0.01	\$82.95	0.13	0.01	\$82.95

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515011417469	HANDLE SURG KNIFE DETACHABLE BLADE SZ 3	2	2	0.26	1.04	\$26.08	0.26	1.04	\$26.08
D	6515003447800	HANDLE SURGICAL KNIFE DET BLADE 3 NARROW NOSE	4	0	0.40	0.43	\$22.08	0.00	0.00	\$0.00
C	6515003447880	HANDLE SURGICAL KNIFE DET BLADE 7 NARROW NOSE	2	1	0.20	0.20	\$14.64	0.10	0.10	\$7.32
D	6515011863652	HOLDER INSTR STERILIZATION U-SHAPED 8X2.75IN	4	0	1.28	0.80	\$150.00	0.00	0.00	\$0.00
A	6515006169173	HOLDER SUTURE NDL CASTRO 5.5INLIGHTWEIGHT STR	2	2	0.12	0.01	\$367.20	0.12	0.01	\$367.20
A	6515006903198	HOLDER SUTURE NDL DEBAKEY 7IN SERR	2	2	0.40	0.20	\$153.42	0.40	0.20	\$153.42
A	6515006903200	HOLDER SUTURE NDL DEBAKEY 9IN SERR	2	2	0.62	0.20	\$185.74	0.62	0.20	\$185.74
A	6515003419800	HOLDER SUTURE NDL MASSON 10.5IN STRT JAW LOCK	2	2	0.56	0.20	\$324.28	0.56	0.20	\$324.28
A	6515011398908	HOLDER SUTURE NEEDLE 5IN TUNG CARB JAW CRS HANDLE	2	2	0.33	2.82	\$628.72	0.33	2.82	\$628.72
A	6515006903202	HOLDER SUTURE NEEDLE DEBAKEY 12IN LG SERRATED	2	2	0.56	0.20	\$212.50	0.56	0.20	\$212.50
D	6515011648884	HOLDER SUTURE NEEDLE HEGAR-MAYO 10IN F/GENER	2	0	0.60	0.40	\$135.78	0.00	0.00	\$0.00
A	6515002998737	HOLDER SUTURE NEEDLE HEGAR-MAYO 7IN SER JAW	4	4	0.88	0.04	\$154.20	0.88	0.04	\$154.20
A	6515012434533	HOLDER SUTURE RYDER CLASSIC PLUS 9IN JAW WIDTH 1MM NONDETACHABLE	2	2	0.20	7.00	\$496.36	0.20	7.00	\$496.36

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
D	6515003421400	HOOK BRAIN DISSECTING ADSON 90 DEGREE 8IN	1	0	0.23	0.10	\$30.18	0.00	0.00	\$0.00
A	6515003435800	KNIFE AMPUTATING LISTON 10.5IN CURVED	1	1	0.38	0.10	\$138.42	0.38	0.10	\$138.42
D	6515011656712	NEEDLE HEPARIN FLUSHING 18GA 2.50IN OLIVE T	2	0	0.40	0.40	\$71.50	0.00	0.00	\$0.00
A	6515014961930	NEEDLE HOLDER CASTROVIEJO STYLE CRS 8.75 O/A LG STR SERRATED	2	2	0.36	0.16	\$1,260.24	0.36	0.16	\$1,260.24
A	1670009962780	NET CARGO TIE DOWN 5.5FTX14.5	2	2	40.00	10.00	\$284.00	40.00	10.00	\$284.00
A	1670009694103	NET CARGO TIE DOWN 96IN HT 10,000LB CAP	1	1	20.00	5.00	\$142.00	20.00	5.00	\$142.00
A	6515011398962	OBTURATOR CARDIOVASCULAR TOURNIQUET 12IN LG J	2	2	0.46	0.40	\$51.06	0.46	0.40	\$51.06
A	1670008204896	PALLET CARGO AIRCRAFT 108INX88IN	1	1	200.00	9.00	\$856.96	200.00	9.00	\$856.96
A	6515011399048	PLIERS WIRE SUTURE CUTTING 6.75IN LG SERRATED	2	2	4.00	0.24	\$510.46	4.00	0.24	\$510.46
D	6515014864310	PUMP IV INFUSION 3-CHANNEL BATT/AC	1	0	4.90	0.37	\$5,768.90	0.00	0.00	\$0.00
D	6530011398074	RACK INSTRUMENT STERILE WEINSTEIN 12X2.75 IN	4	0	12.00	2.00	\$354.84	0.00	0.00	\$0.00
A	6515011398267	RASP BONE 3IN BLADE PUTTI STYLE DOUBLE ENDE	1	1	1.47	0.12	\$184.76	1.47	0.12	\$184.76
A	6515011398969	RETRACTOR ABDOM CODMAN-SHURTLEFF	1	1	2.86	0.40	\$639.99	2.86	0.40	\$639.99

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515003603510	RETRACTOR ABDOMINAL DEAVER 1.5X12IN	2	2	1.38	0.20	\$46.38	1.38	0.20	\$46.38
D	6515003603490	RETRACTOR ABDOMINAL DEAVER 1X12IN	2	0	1.12	0.20	\$252.82	0.00	0.00	\$0.00
D	6515003603530	RETRACTOR ABDOMINAL DEAVER 2X12IN	2	0	1.44	0.20	\$62.44	0.00	0.00	\$0.00
A	6515011398196	RETRACTOR GEN OPER HARRINGTON 13X2.25IN	2	2	2.00	0.32	\$314.04	2.00	0.32	\$314.04
A	6515011397941	RETRACTOR HARRINGTON SPLANCHNIC BLADE END 2.5 IN WIDE	2	2	0.50	0.00	\$460.54	0.50	0.00	\$460.54
A	6515013325163	RETRACTOR LUNG ALLISON LRG SZ 12.25IN BLADE 2.125IN BLADE	2	2	2.30	0.30	\$566.84	2.30	0.30	\$566.84
D	6515009269193	RETRACTOR MASTWEITLANER 6.5IN HOOK 4 PRONG	4	0	1.24	0.80	\$206.40	0.00	0.00	\$0.00
A	6515011346649	RETRACTOR RIB BURFORD-FINOCCHIETO	1	1	6.50	0.10	\$232.50	6.50	0.10	\$232.50
A	6515003617250	RETRACTOR RIB FINOCCHIETO FENESTRATED MED	1	1	2.00	0.26	\$879.74	2.00	0.26	\$879.74
A	6515011398995	RETRACTOR RIB TUFFIER 47MM DEEPX45MM WIDE W/15CM SPREAD	1	1	2.70	0.15	\$321.17	2.70	0.15	\$321.17
A	6515011346643	RETRACTOR SCAPULAR DAVIDSON 3X3.50IN	1	1	0.83	0.10	\$292.35	0.83	0.10	\$292.35
A	6515003603850	RETRACTOR SET ABDOMINAL RICHARDSON-EASTMAN 2S	2	2	1.00	0.40	\$53.02	1.00	0.40	\$53.02
D	6515003609200	RETRACTOR SET GEN OPERAT DBL END 8.5&8.75IN	4	0	1.20	0.40	\$166.04	0.00	0.00	\$0.00

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515011397642	RETRACTOR STERNUM COOLEY DESIGN SELF RETAININ	1	1	1.00	0.10	\$184.16	1.00	0.10	\$184.16
A	6515003620200	RETRACTOR VEIN CUSHING DESIGN 8.5IN	2	2	0.32	0.20	\$153.06	0.32	0.20	\$153.06
A	6515003315400	RONGEUR STILLE-LUER DBL-JOINTED STR 9IN RD	1	1	0.76	0.30	\$469.14	0.76	0.30	\$469.14
A	8340NCM060739	ROPAK CONTAINER LID 40X48	6	6	30.00	6.00	\$224.04	30.00	6.00	\$224.04
D	6515003631100	SAW AMPUTATING SATTERLEE 8IN BLADE 2.25IN	1	0	0.71	0.10	\$67.43	0.00	0.00	\$0.00
A	6515012988014	SCISSOR GEN SURG JORGENSEN 9IN CRV SHARP PT	2	2	0.02	0.00	\$235.12	0.02	0.00	\$235.12
A	6515003640920	SCISSOR GEN SURG MAYO 7IN BLUNT 1.626IN CUT	4	4	0.64	0.40	\$30.24	0.64	0.40	\$30.24
D	6515003640520	SCISSOR GEN SURG MAYO CRV BLADE 6.50-7IN BLNT	4	0	0.40	0.40	\$32.64	0.00	0.00	\$0.00
A	6515010895668	SCISSOR GEN SURG METZENBAUM 11IN DELICATE	2	2	0.48	0.20	\$292.92	0.48	0.20	\$292.92
A	6515010604280	SCISSOR GEN SURG METZENBAUM 5.75IN CRVD BL	4	4	0.80	0.40	\$77.96	0.80	0.40	\$77.96
A	6515006903223	SCISSOR GEN SURG POTTS SMITH 7.5IN	1	1	0.14	0.10	\$129.26	0.14	0.10	\$129.26
A	6515011151730	SCISSOR GEN SURGERY METZENBAUM DISSEC 9IN CRV	4	4	0.76	0.04	\$208.64	0.76	0.04	\$208.64
A	6515011398988	SCISSOR THORACIC SLIGHTLY CRVD NELSON DSGN 1	2	2	0.80	2.00	\$306.40	0.80	2.00	\$306.40

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515003657100	SCISSOR TONSIL METZENBAUM 7IN CRV BLUNT PTS	4	4	0.40	0.40	\$522.24	0.40	0.40	\$522.24
D	6515011511822	SCISSOR WIRE CUT SURG 4.75IN SHORT ANG	2	0	0.40	0.20	\$88.30	0.00	0.00	\$0.00
A	6515014961106	SCISSORS CARDIOVASCULAR CRS 6.75IN O/A LG COOLEY	1	1	0.17	0.08	\$374.54	0.17	0.08	\$374.54
A	6515009235000	SCISSORS GEN SURG NELSON LUNG DISSECTING 9IN	2	2	0.32	0.32	\$105.24	0.32	0.32	\$105.24
D	6515006903224	SCISSORS GEN SURG POTTS SMITH 7.50IN ANG	2	0	0.38	0.20	\$209.94	0.00	0.00	\$0.00
A	6515009235004	SCISSORS GENERAL SURG NELSON LUNG DISSECTING	2	2	0.31	0.64	\$167.40	0.31	0.64	\$167.40
A	6515014961952	SCISSORS TENOTOMY POTTS CRS CURVED 8.0 O/A LG MIRROR FINISH	2	2	0.36	0.14	\$354.44	0.36	0.14	\$354.44
A	6515014961100	SCISSORS THORACIC DIETHRICH CRS 7.125IN O/A LG	1	1	0.12	0.08	\$360.67	0.12	0.08	\$360.67
A	6515011643750	SCISSORS VASCULAR METZENBAUM 8IN CURVED BLUNT POINT	4	4	0.72	0.02	\$178.92	0.72	0.02	\$178.92
A	6515012273577	SCISSORS VASCULAR POTTS-SMITH 7.5IN 45 DEG ANGLE BLADES CURVED	1	1	0.10	1.00	\$167.21	0.10	1.00	\$167.21
A	6530015547895	SOCKET ACCESSORY CLAMP EASY LOCK FOR STIRRUPS	1	1	1.55	0.15	\$476.47	1.55	0.15	\$476.47
F	6515015071861	STERNUM SAW W/BLADE AND PROTECTOR	0	1	0.00	0.00	\$0.00	1.80	0.50	\$3,354.44
F	6515015039445	STERNUM SAW POWER UNIT P/O 115V SARNS SYS II	0	1	0.00	0.00	\$0.00	3.50	0.28	\$1,427.27

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6530015571603	SUPPORT ARM MULTIPURPOSE LATERAL AND PRONE	1	1	1.15	0.22	\$690.50	1.15	0.22	\$690.50
A	6530011732085	TRAY INSTRUMENT 10.5X10X3.5IN	1	1	2.67	0.33	\$113.06	2.67	0.33	\$113.06
D	6530011669036	TRAY INSTRUMENT 15X10.5X3.5IN PERF W/HANDLES	2	0	12.00	0.50	\$540.54	0.00	0.00	\$0.00
A	6515014565737	TUBE VASCULAR GRAFT HEMASHIELD WOVEN DOUBLE VELOUR 20MM X 10MM	1	1	0.55	0.13	\$1,253.21	0.55	0.13	\$1,253.21
A	6515011651134	TUNNELER GRAFT CRAWFORD-COOLEY 15.75IN .50IN	1	1	0.20	0.20	\$238.20	0.20	0.20	\$238.20
A	6515011541694	ULTRASOUND BLD PRES/AIR EMBOLUS DET UNIT	1	1	150.00	7.16	\$650.00	150.00	7.16	\$650.00
Medication										
D	6505014226805	IOPROMIDE INJ 50ML VI 10S	1	0	1.55	0.02	\$45.23	0.00	0.00	\$0.00
Consumable										
C	6515012360864	ADAPTER CATHETER TO LUER SYRINGE FITS 4-6FR CATH 24S	6	1	0.72	0.10	\$86.34	0.12	0.02	\$14.39
A	6515014502045	ADMIN SET INFUSION PUMP U/W MEDSYS III 50S	1	1	3.00	1.00	\$454.91	3.00	1.00	\$454.91
D	6515010095298	BLADE SURG KNIFE DET NO.11 SMALL TANG 150S	1	0	0.75	0.10	\$37.47	0.00	0.00	\$0.00
D	6515010095295	BLADE SURG KNIFE DETACHABLE #10 150S	1	0	0.75	0.10	\$64.59	0.00	0.00	\$0.00

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515011669027	BLOCK BITE ENDOSCOPIC FLEXIBLE 2.25X1.5 IN PLAS 3S	1	1	0.06	0.00	\$38.73	0.06	0.00	\$38.73
C	6515015570119	BLOCKER SET ENDOBRONCHIAL ARNDT SPERICAL 7.5MM 9.0FR 78CM L	4	1	0.48	0.24	\$968.32	0.12	0.06	\$242.08
C	6515015570102	BLOCKER SET ENDOBRONCHIAL ARNDT SPERICAL BALLOON 6MM 7.0FR 65CM	4	1	0.04	0.04	\$968.32	0.01	0.01	\$242.08
A	6515004588411	CATH & CONN SUCT TRACH 14FR 50S	1	1	3.55	0.62	\$72.35	3.55	0.62	\$72.35
D	6515004588416	CATH & CONN SUCT TRACH 18FR WHISTLE TIP 50S	1	0	5.00	0.77	\$21.60	0.00	0.00	\$0.00
C	6515011154710	CATH ARTERIAL EMBOLECTOMY FOGARTY 5FR 80CM	4	1	0.44	0.02	\$238.60	0.11	0.00	\$59.65
C	6515011774924	CATH CARDIO FOGARTY EMBOLECTOMY 6FR 80CM 1S	2	1	0.22	0.01	\$90.06	0.11	0.00	\$45.03
A	6515014206849	CATHERIZATION SET INTRAVASCULAR 35MM LOOP	1	1	0.20	0.02	\$315.00	0.20	0.02	\$315.00
C	6515015583292	CATHERIZATION SET INTRAVASCULAR STD 12TO20MM DIA 120CM 6F X 100CM	2	1	3.10	0.36	\$1,152.76	1.55	0.18	\$576.38
B	6515014206845	CATHERIZATION SET, INTRAVASCULAR, 25MM LOOP	1	2	0.20	0.02	\$315.00	0.40	0.04	\$630.00
C	6515015569666	CATHETER ANGIOGRAPHY 39.37IN L 5FR NYLON 5S	10	1	6.50	1.20	\$2,536.10	0.65	0.12	\$253.61
C	6515015563292	CATHETER ANGIOGRAPHY NYLON 39.37IN 5 FR 5S	2	1	1.30	0.22	\$507.22	0.65	0.11	\$253.61
C	6515011749896	CATHETER CARDIO FOGARTY EMBOLECTOMY 7FR 80CM RADPQ STER DISP	2	1	0.34	0.04	\$88.28	0.17	0.02	\$44.14

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
C	6515011749895	CATHETER CARDIO FOGARTY IRRIGATION 4FR 80CM LG RADPQ STER DISP	4	2	0.95	0.57	\$248.96	0.48	0.28	\$124.48
A	6515014170785	CATHETER CARDIOVACULAR GLIDECATH D16 5.0 DIA FR 100CM LG 5S	1	1	0.18	0.20	\$922.20	0.18	0.20	\$922.20
D	6510010854742	CELLULOSE OXIDIZED REGEN 8X4IN SURGICEL 24S	2	0	1.00	1.00	\$2,642.04	0.00	0.00	\$0.00
C	6515013165073	CLIP HEMOSTATIC LIGACLIP DSGN LARGE TITANIUM 6.2-12.5MM 108S	3	1	1.50	0.13	\$852.06	0.50	0.04	\$284.02
C	6515012594310	CLIP HEMOSTATIC LIGATION SM 2.50-3MM LG TITANIUM STER 216S	3	1	0.90	0.14	\$724.44	0.30	0.05	\$241.48
C	6515015571493	COIL EMBOLIZATION COOK 4CM L DISP/STER 4-2MM DIA MICROCOIL	4	1	0.48	0.32	\$737.76	0.12	0.08	\$184.44
C	6515015571517	COIL EMBOLIZATION COOK 7CM L MICROCOIL PLATINUM TORNADO6-2MM DIA	4	1	0.48	0.32	\$737.76	0.12	0.08	\$184.44
A	6515015002776	COIL EMBOLIZATION COOK CRS 3CM LG 5MM ARTERIAL & VENOUS2S	1	1	0.02	0.02	\$123.34	0.02	0.02	\$123.34
A	6515015002768	COIL EMBOLIZATION COOK CRS 5CM LG 5MM EMBOLUS DIA 2S	1	1	0.02	0.02	\$123.34	0.02	0.02	\$123.34
A	6515015002763	COIL EMBOLIZATION COOK CRS 5CM LG 8MM ARTERIAL VENOUS 2S	1	1	0.02	0.03	\$123.34	0.02	0.03	\$123.34
A	6515015571878	COIL EMBOLIZATION NESTER 14CM L 0.035IN CATHETER ID SOFT PLATINUM	1	1	0.12	0.08	\$184.44	0.12	0.08	\$184.44
A	6515015571869	COIL EMBOLIZATION NESTER 14CM LONG 0.035IN CATHETER ID PLATINUM	1	1	0.12	0.08	\$184.44	0.12	0.08	\$184.44
A	6515015571861	COIL EMBOLIZATION NESTER 14CM LONG 0.035IN DIA SOFT PLATINUM	1	1	0.12	0.08	\$184.44	0.12	0.08	\$184.44

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515015571235	COIL EMBOLIZATION SS CATHETER &ENDHOLE DIA 0.038IN 5CM LG 2S	1	1	0.11	0.08	\$115.28	0.11	0.08	\$115.28
B	6515013886892	COIL PUSHER VASCULAR SURG FIBERED COIL PUSHER-16 175CM TRIAL LG	1	2	0.01	0.00	\$268.98	0.02	0.00	\$537.96
D	6510014537267	COLLAGEN HEMOSTATIC ABS 1GM 6S	2	0	2.00	2.00	\$1,408.90	0.00	0.00	\$0.00
A	6515007257843	CONNECTOR TUBING BRANCHED Y STR SERR 50S	1	1	0.26	0.03	\$53.88	0.26	0.03	\$53.88
A	6515009269201	CONNECTOR TUBING STRAIGHT 50S	1	1	0.65	0.06	\$35.21	0.65	0.06	\$35.21
A	6515012694265	CONTROL DEVICE PRESSURE FLOW MED NOT TO EXCEED 1050 PSI 24S	1	1	0.14	0.06	\$175.22	0.14	0.06	\$175.22
A	6515015274681	DRAINAGE UNIT PLEURAL CAVITY DRY SUCTION 6S	3	1	6.00	5.66	\$868.50	2.00	1.89	\$289.50
F	30419	ENDO GIA II 30-3.5 DLU	0	1	0.00	0.00	\$0.00	0.50	0.05	\$626.22
F	030415	ENDO GIA II 60-4.8 SULU	0	1	0.00	0.00	\$0.00	0.50	0.05	\$684.00
A	6515011803421	FELT SURGICAL POLYTETRAFLUOR PLEDGET 6X6IN 5S	1	1	0.48	0.09	\$782.67	0.48	0.09	\$782.67
C	6515015567876	FILTER IMPLANT SE VENA CAVA GUNTHER TULIP FEMORAL DIA30MM LG45MM	5	1	5.00	0.13	\$9,510.20	1.00	0.03	\$1,902.04
C	6515015566935	FILTER IMPLANT SET VENA CAVA DIA-30MM LG-45MM 7.0- FR STER	5	1	0.28	0.13	\$9,510.20	0.06	0.03	\$1,902.04
C	6515015569518	FILTER RETRIEVAL SET VENA CAVA GUNTHER TULIP	2	1	1.76	0.24	\$1,037.48	0.88	0.12	\$518.74

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515005293346	GEL ULTRASOUND 250ML SQ/BT 12S	1	1	7.60	23.90	\$43.76	7.60	23.90	\$43.76
D	6510000802053	GELATIN SPONGE 6X2X.7CM PEEL-OPEN 12S	1	0	0.10	0.10	\$76.22	0.00	0.00	\$0.00
C	6515013845708	GUIDE WIRE CARDIO CATH 150CM ANG TIP SHAPE POLYUR CONSTR 5S	2	1	0.02	0.00	\$707.02	0.01	0.00	\$353.51
C	6515013883179	GUIDE WIRE CARDIOVASCULAR CATHETER CRES 145IN TAPERED DISP STER	2	1	0.40	0.03	\$438.60	0.20	0.02	\$219.30
C	6515013883391	GUIDE WIRE EXT CARDIOVASCULAR CATH STER SS.35IN SHAFT DIA 115CM	2	1	0.30	0.02	\$122.96	0.15	0.01	\$61.48
C	6515014198574	GUIDE WIRE, CARDIOVASCULAR	5	1	1.00	0.10	\$145.00	0.20	0.02	\$29.00
A	6515014200416	GUIDE WIRE, CARDIOVASCULAR CATHETER ANGLE TIP 5S	1	1	0.20	0.02	\$285.00	0.20	0.02	\$285.00
A	6515014200156	GUIDE WIRE, CARDIOVASCULAR STRAIGHT TIP 5S	1	1	0.20	0.02	\$285.00	0.20	0.02	\$285.00
A	6515015564302	GUIDE WIRE,CARDIOVASCULAR CAHTETER WIRE SZ-.014 5CM SEG 130CM LG	1	1	0.06	0.03	\$143.03	0.06	0.03	\$143.03
A	6515015564280	GUIDE WIRE,CARDIOVASCULAR CATHETER 0.014 WIRE SZ 5CM SEG	1	1	0.06	0.03	\$178.80	0.06	0.03	\$178.80
C	6515015570063	GUIDE WIRE,CARDIOVASCULAR CATHETER BENTSON 23CM SZ .035IN 150CM	2	1	0.20	0.20	\$482.78	0.10	0.10	\$241.39
A	6515015564276	GUIDE WIRE,CARDIOVASCULAR CATHETER WIRE SZ 0.014IN SHAFT SS	1	1	0.06	0.03	\$214.55	0.06	0.03	\$214.55
A	6515015597113	INSERT JAW VASCULAR CLAMP LAVIS MESH LATEX FREE 45MM-LG 10S	1	1	0.25	0.25	\$326.86	0.25	0.25	\$326.86

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515015596997	INSERT JAW VASCULAR CLAMP STRAIGHT 60MM LONG LATIS MESH 10S	1	1	0.33	0.12	\$326.86	0.33	0.12	\$326.86
C	6515015574059	INTRODUCER KIT CATHETER PERCUTANEOUS 4FR ECHOGENIC 21GAX7CM 10S	2	1	10.00	1.11	\$829.98	5.00	0.56	\$414.99
C	6515015207224	INTRODUCER,CATHETER IV PINNACLE W/DILATOR 5FR 10CM LG 10	2	1	0.34	0.14	\$568.70	0.17	0.07	\$284.35
A	6515011656718	LOOP VASCULAR SURG SILICONE RBRR 10S	1	1	1.00	0.04	\$16.90	1.00	0.04	\$16.90
D	6515011921105	MONITORING KIT ARTERIAL PRESSURE STER 5S	10	0	8.40	0.83	\$1,254.20	0.00	0.00	\$0.00
D	6515014169117	MONITORING SET VASCULAR PRESSURE STER 10S	5	0	60.00	15.00	\$5,000.00	0.00	0.00	\$0.00
D	6515015261627	NEEDLE HYPO 22GAX1.5IN SAFETY SHIELDING 50S	1	0	1.22	0.15	\$22.00	0.00	0.00	\$0.00
D	6515015261730	NEEDLE HYPO GP 25GA X1IN SAFETY SHIELD 50S	2	0	11.10	7.30	\$44.00	0.00	0.00	\$0.00
D	6515015261729	NEEDLE HYPODERMIC SAFETY 18GA X 1.500 50S	2	0	0.50	0.04	\$44.00	0.00	0.00	\$0.00
A	6515015580878	SHEATH INTRODUCER VASCULAR PINNACLE W/DILATOR 7FR 10S	1	1	0.85	0.12	\$345.83	0.85	0.12	\$345.83
C	6515013766552	STAPLER & CUTTER UNIT SURG 55MM LINEAR W/SAFETY LOCK TITANIUM 3S	3	1	2.55	0.20	\$1,790.46	0.85	0.07	\$596.82
F	030813	STAPLER MULTIFIRE ENDO GIA 30-3.5 12MM	0	1	0.00	0.00	\$0.00	0.50	0.05	\$360.00
C	6515013750139	STAPLER SURG 21 UNIT CAP TITANIUM ALLOY 60MM LINEAR RELOADABLE3S	3	1	6.00	0.07	\$1,653.90	2.00	0.02	\$551.30

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515013750138	STAPLER SURG 21 UNIT CAP TITANIUM ALLOY 60MM LINEAR RELOADING 12S	1	1	1.00	0.08	\$1,218.00	1.00	0.08	\$1,218.00
A	6515014163205	STAPLER SURG PROXIMATE 30MM VASCULAR 15UN CAP STER DISP 3S	1	1	3.00	0.23	\$626.82	3.00	0.23	\$626.82
A	6515014163196	STAPLER SURG PROXIMATE DESIGN 33MM VASCULAR 15UN CAP STER DISP 12S	1	1	0.10	0.03	\$1,210.16	0.10	0.03	\$1,210.16
C	6515014154944	STAPLER SURG STER DISP TITANIUM OVERALL 3S	3	1	14.52	0.75	\$1,870.74	4.84	0.25	\$623.58
A	6515014154724	STAPLER SURG TITANIUM OVERALL DISP STER 12S	1	1	0.10	0.11	\$1,231.72	0.10	0.11	\$1,231.72
F	030312L	STAPLES MULTIFIRE ENDO GIA 60-3.5 SULU 6S	0	1	0.00	0.00	\$0.00	0.50	0.05	\$486.72
A	6515015567281	STENT GRAFT TRACEOBRONCHIAL DIA-8MM LG-40MM 9FR SELF EXPANDING	1	1	0.06	0.03	\$4,034.63	0.06	0.03	\$4,034.63
A	6515015567285	STENT GRAFT TRACHEOBRONCHIAL DIA-10MM LG-40MM 9FR SELF EXPANDING	1	1	0.06	0.03	\$4,034.63	0.06	0.03	\$4,034.63
D	6515015567303	STENT GRAFT TRACHEOBRONCHIAL ENOPROSTHESIS DIA 6MM LG40MM 8FR	1	0	0.06	0.03	\$4,034.63	0.00	0.00	\$0.00
F	PN 5756	STERUM SAW BLADE NON-STERILE, BULK PACK 30S	0	1	0.00	0.00	\$0.00	1.50	0.05	\$760.00
D	6515014206840	STOPCOCK, INTRAVENOUS THERAPY 50S	1	0	0.20	0.02	\$155.00	0.00	0.00	\$0.00
A	6515011432880	SUTURE ABS 2-0 27IN GI VICRYL TAPER 36S	1	1	0.39	0.04	\$86.94	0.39	0.04	\$86.94
C	6515013313324	SUTURE ABS SURG GYN/OB SZ 1 SGL ARMED 36IN UNDYED PG 3S	2	1	0.02	0.00	\$49.42	0.01	0.00	\$24.71

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515010087107	SUTURE ABS SURG SZ 1-0 2.25FT POLYGLYCOLIC ACID BR STER 36S	1	1	0.43	0.02	\$90.05	0.43	0.02	\$90.05
D	6515015594700	SUTURE ABSORBABLE SURG 1-0 CT-1 NEEDLE COATED BRAIDED18IN 96S	2	0	1.70	0.24	\$296.36	0.00	0.00	\$0.00
A	6515015594045	SUTURE ABSORBABLE SURG SGL ARMED SZ2-0 54IN COATED PLYGLACTIN 24S	1	1	1.25	0.18	\$86.09	1.25	0.18	\$86.09
C	6515011535730	SUTURE NONABS 3-0 36IN CARDIO DBL ARM MONO 36	2	1	0.50	0.03	\$432.04	0.25	0.01	\$216.02
A	6515010113675	SUTURE NONABS 4-0 36IN SURG DBL ARM MON 36S	1	1	0.25	0.01	\$216.02	0.25	0.01	\$216.02
D	6515002867038	SUTURE NONABS 5-0 36IN CARDIO DBL ARM 36S	1	0	0.78	0.60	\$218.33	0.00	0.00	\$0.00
A	6515011399090	SUTURE NONABS 6-0 30IN CARDIO DBL ARM PLAS 36	1	1	0.43	0.04	\$297.87	0.43	0.04	\$297.87
A	6515011399089	SUTURE NONABS SURG CARDIO 5-0 36IN LG DBL ARMED PLAS STER 36S	1	1	0.01	0.00	\$361.50	0.01	0.00	\$361.50
A	6515015594036	SUTURE NONABS SURG DBL ARM POLYPROPYL BLUE 7-0 24IN STER 12S	1	1	0.75	0.14	\$497.33	0.75	0.14	\$497.33
A	6515011621945	SUTURE NONABS SZ 3-0 B3 1/2 CIRCLE 36IN LG MONO STER 3S	1	1	0.50	0.04	\$259.41	0.50	0.04	\$259.41
C	6515013604410	SUTURE NONABSORBABLE 6-0 36S	2	1	0.40	0.04	\$556.28	0.20	0.02	\$278.14
D	6515014240663	SUTURE NONABSORBABLE SURG VASCULAR SZ 6-0 ORDER BY 3S	1	0	0.33	0.04	\$466.56	0.00	0.00	\$0.00
A	6515015217408	SUTURE SH SH BL MONO 1/2 CIRCLE SUTURE L 48IN SZ 3-0 PKG/3 DOZ	1	1	0.04	0.05	\$253.87	0.04	0.05	\$253.87

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515013920191	SUTURE, NONABSORBABLE SURG CARDIOVASCULAR 3-0 36FTS	1	1	0.20	0.02	\$128.26	0.20	0.02	\$128.26
A	6515014207644	SYRINGE FLUID DISPENSING 25S	1	1	0.20	0.02	\$56.00	0.20	0.02	\$56.00
A	6515013907482	SYRINGE HYPODERMIC STER DISP 150 MILLILITERS LUER LOCK 50S	1	1	5.00	0.81	\$691.65	5.00	0.81	\$691.65
A	6515015572560	TORQUE DEVICE GUIDE WIRE CARDIOVASCULAR DIA .010- .038IN 5S	1	1	0.40	0.03	\$51.87	0.40	0.03	\$51.87
A	6515007637366	TUBE DRAINAGE SURG THORAC 32FR STR 10S	2	2	3.08	0.40	\$138.76	3.08	0.40	\$138.76
A	6515008669073	TUBE DRAINAGE SURG THORAC 36FR STR 10S	2	2	3.08	0.40	\$148.98	3.08	0.40	\$148.98
C	6515012259715	TUBE ENDOBRONCHIAL LEFT MAINSTEM BRONCHUS E5 DB LUMEN 37FR STER	5	1	0.46	0.98	\$376.55	0.09	0.20	\$75.31
C	6515012259716	TUBE ENDOBRONCHIAL LEFT MAINSTEM BRONCHUS E5 DBL LUMEN 39FR STER	5	1	5.00	0.77	\$430.35	1.00	0.15	\$86.07
D	6515012259714	TUBE ENDOBRONCHIAL LEFT MAINSTEM BRONCHUS E5 DBL LUMEN 41FR	5	0	1.00	0.10	\$491.85	0.00	0.00	\$0.00
E	6515012564939	TUBE ENDOBRONCHIAL LF MAINSTREAM BRONCHUS 35FR 6MM ID PLAS DISP	0	1	0.00	0.00	\$0.00	0.10	0.01	\$132.21
D	6515013148395	TUBE EXTENSION INJ SET 48 IN 25S	1	0	6.00	0.75	\$83.00	0.00	0.00	\$0.00
D	6515015117035	TUBE SUCTION SURG 72IN PLAS UW 6515014609174	50	0	50.00	1.00	\$252.00	0.00	0.00	\$0.00
A	6515014568954	TUBE VASC GRAFT 6MM X 20CM RINGED SECTION	2	2	0.40	0.00	\$2,164.00	0.40	0.00	\$2,164.00

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

Status	NSN	Supply description	AS qty	EESP qty	AS wt	AS cube	AS cost	EESP wt	EESP cube	EESP cost
A	6515014569131	TUBE VASC GRAFT GORE-TEX DESIGN 8MM X20CM	2	2	0.22	0.03	\$2,164.00	0.22	0.03	\$2,164.00
A	6515014566704	TUBE VASCULAR GRAFT, AORTIC 14MM	1	1	0.55	0.12	\$1,253.21	0.55	0.12	\$1,253.21
A	6515014566816	TUBE VASCULAR GRAFT, AORTIC 14MM	1	1	0.55	0.12	\$829.61	0.55	0.12	\$829.61
A	6515014566685	TUBE VASCULAR GRAFT, AORTIC 16MM	1	1	0.55	0.12	\$1,253.21	0.55	0.12	\$1,253.21
A	6515014566811	TUBE VASCULAR GRAFT, AORTIC 16MM	1	1	0.55	0.12	\$829.61	0.55	0.12	\$829.61
A	6515014566681	TUBE VASCULAR GRAFT, AORTIC 18MM	1	1	0.55	0.12	\$1,253.21	0.55	0.12	\$1,253.21
A	6515014566900	TUBE VASCULAR GRAFT, AORTIC 18MM	1	1	0.55	0.12	\$860.72	0.55	0.12	\$860.72
A	6515014566909	TUBE VASCULAR GRAFT, AORTIC 20MM	1	1	0.55	0.12	\$829.61	0.55	0.12	\$829.61

Note. A = quantity unchanged; B = quantity increase; C = quantity decrease; D = delete; E = add, deleted replacement item; F = add new item

REPORT DOCUMENTATION PAGE

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB Control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

1. REPORT DATE (DD MM YY) 10 11 10		2. REPORT TYPE Technical Document		3. DATES COVERED (from – to) January–September 2010	
4. TITLE Air Force Operational Medicine: Using the Enterprise Estimating Supplies Program to Develop Materiel Solutions for the Thoracic/Vascular Surgery Team (FFGKT)				5a. Contract Number: GS-09K-99BHD 5b. Grant Number: 5c. Program Element Number: 5d. Project Number: 9T7SDGIS006 5e. Task Number: 5f. Work Unit Number: 60334	
6. AUTHORS: Nix, Ralph E.; Hopkins, Curt C.; Wing, Vern; Brown, Carrie; Jackson, Charles				8. PERFORMING ORGANIZATION REPORT NUMBER 10-16P 10. SPONSOR/MONITOR'S ACRONYM(S) NMRC/NMSC 11. SPONSOR/MONITOR'S REPORT NUMBER(s)	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Commanding Officer Naval Health Research Center 140 Sylvester Rd San Diego, CA 92106-3521					
8. SPONSORING/MONITORING AGENCY NAMES(S) AND ADDRESS(ES) Commanding Officer Naval Medical Research Center 503 Robert Grant Ave Silver Spring, MD 20910-7500 Commander Navy Medicine Support Command P.O. Box 140 Jacksonville, FL 32212-0140					
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT <p>The Naval Health Research Center (NHRC) has used its modeling and simulation expertise to develop and update conventional U.S. Air Force medical assets since 2004. Air Force medical modeling capabilities currently capture care and treatment of the sick and injured from the first responder through theater hospitalization. The objective of this study was to leverage medical modeling and simulation advantages to provide recommendations for allowance standard (AS) configurations based on the Air Force Thoracic/Vascular Surgery Team (FFGKT) operational and clinical requirements.</p> <p>NHRC analysts reviewed the FFGKT, analyzed clinical requirements with subject matter experts, and used modeling and simulation tools to develop the operationally-based and patient-driven recommended 917G AS line list. The Unit Type Code capabilities, operational requirements, and materiel solutions were identified, addressing issues of modernization, clinical requirement, standardization, and redundancy. In this study, 42 line items were recommended for deletion due to redundancy and clinical requirement. The net decrease in weight and cube was 26.93%, with a 23.7% decrease in cost.</p>					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UNCL	18. NUMBER OF PAGES 33	18a. NAME OF RESPONSIBLE PERSON Commanding Officer
a. REPORT UNCL	b. ABSTRACT UNCL	c. THIS PAGE UNCL			18b. TELEPHONE NUMBER (INCLUDING AREA CODE) COMM/DSN: (619) 553-8429